

i. Proposal number.# 2001-F-211*

ii. Short proposal title.# Spring Creek/Keswick Reservoir Feasibility Study*

APPLICABILITY TO CALFED ERP GOALS AND IMPLEMENTATION PLAN

1a1. Link to ERP Strategic Goals: What Strategic Goal(s) is /are addressed by this proposal? List the letter(s) of all that apply.

A. At-risk species

B. Rehabilitate natural processes

C. Maintain harvested species

D. Protect-restore functional habitats

E. Prevent non-native species and reduce impacts

F. Improve and maintain water quality# A, B, C, D, F*

1a2. Describe the degree to which the proposal will contribute to the relevant goal. Quantify your assessment and identify the contribution to ERP targets, when possible.#

The implementation of this project would contribute significantly, but somewhat indirectly towards the following CALFED Goals A, B, C, D, and F. The Feasibility Study would provide the needed analysis and designs to cleanup the contaminated sediments.

ERP Targets - #7 and 8 (Reduce pollutants, heavy metals in Sacramento River)

The proposal directly contributes to Programmatic Action listed with this target: develop a cooperative program to eliminate scouring of toxic metal laden sediments in Spring Creek and Keswick Reservoir. The proposal also directly contributes to the Programmatic Action calling for CALFED to participate in a cooperative program to remedy heavy metal pollution from Iron Mountain Mine to meet basic plan standards and implement reliable and proven remedies to ensure control of heavy metal discharge into the Sacramento River.*

1b. Objectives: What Strategic Objective(s) is/are addressed by this proposal? List Objective (from the table of 32 objectives) and describe potential contribution to ERP Goals. Quantify your assessment, when possible.#

ERP Goal A, Objective 3 (Enhance native biotic communities in Bay-Delta and its watershed)

ERP Goal C, Objective 1 (Enhance fisheries for salmonids, sturgeon)

ERP Goal D, Objective 2 (Restore expanses of all major aquatic habitat in Central Valley)

ERP Goal F, Objective 1 (Reduce loading of toxic contaminants to Bay-Delta and watersheds)*

1c. Restoration Actions: Does the proposal address a Restoration Action identified in Section 3.5 of the PSP? Identify the action and describe how well the proposed action relates to the identified Restoration Action.#

RA #6 (Contaminants in the Central Valley) - The proposal directly address this restoration action. PSP identified the need for bench-scale testing and pilot scale measures to reduce Hg and trace metals at their sources.*

1d. Stage 1 Actions: Is the proposal linked directly, indirectly or not linked to proposed

Stage 1 Actions? If linked, describe how the proposal will contribute to ERP actions during

Stage 1.# Ecosystem Restoration Stage 1 Action #8 - This proposal generally relates to this action by conducting the research and analysis to determine to the best solution to solve a high priority issue.

Environmental Water Quality Program Actions - The proposal directly related to Stage 1 Action #4 (Mercury Evaluation and Abatement in Sacramento River) and Stage 1 Action #4 (Trace metal work; participate in remediation of mine sites)*

1e. MSCS: Describe how the proposal is linked to the Multi-Species Conservation Strategy and if it's consistent with the MSCS Conservation measures. Identify the species addressed and whether the proposal will "recover", "contribute to recovery" or "maintain" each species.# If the project is implemented the action will contribute to recovery by eliminating stressors to the environment.*

1f. Information Richness/Adaptive Probing related to the proposal: Describe the degree to which the proposal provides information to resolve one of the 12 scientific uncertainties (Section 3.3 of the PSP), and whether the proposal offers a prudent approach to answer these uncertainties.# 11 (Contaminates in the Central Valley) - Proposal is related somewhat indirectly to this scientific uncertainty. The proposal addresses needed research on metal contaminated sediments and aquatic toxicity.*

1g. Summarize comments from section 1a through 1f related to applicability to CALFED goals and priorities. Identify the strengths and weaknesses of the proposal, highlighting the applicability of the proposed project to CALFED and CVPIA goals and priorities. Focus on aspects of the proposal that may be important to later stages in the project review and selection process.# The release of toxic metals to the Sacramento River from this area has been a significant problem for many years and there is considerable risk from a catastrophic impacts from releases to the river during very high flows. It is likely that U.S. EPA will not get sufficient funding from the responsible party to complete the project. The project would be a significant step towards meeting some of CALFED's goals, objectives and restoration actions. Therefore CALFED Environmental Water Quality Staff supports a decision to fund some or all of this project.

Weaknesses/Concerns

The PSP states on Page 6 that Public agencies may not use funds to support existing agency mandates or requirements. The PSP also states that projects that are regulatory conditions or mitigation requirements for a prior project will be evaluated on a case by case basis. The above statements in the PSP should be clarified by CALFED legal staff in relation to this proposal. There are existing Federal and State mandates and likely enforcement orders/agreements that require investigation and cleanup of this site.

CALFED is concerned that funding request is conditioned on reaching a settlement on cleanup funding. Settlement negotiations can be lengthy with no guarantee of success. If negotiations fail or there are insufficient funds for cleanup then with proposal may be withdrawn. If CALFED funding is provided, conditions on the availability of funds should be made (e.g., upon a CALFED decision to fund this project the parties shall provide a signed settlement agreement within 30 days or CALFED funding is withdrawn). The costs seem excessive for Tasks 7, 8 and 10. The activities described by these tasks are somewhat redundant. CALFED's portion of these tasks should be reduced by one half. U.S. EPA should seek matching funds from other state agencies such as DTSC and CVRWQCB to complete this project. The proposal lacks data on the frequency and magnitude of current releases of metals to the Sacramento River (concentration and toxicity) associated with current discharges and resulting toxicity from copper, nickel, zinc.

Regardless of the funding source for this project, U.S. EPA will ultimately choose a remedy for this project. There are a number of selection criteria used by U.S. EPA under CERCLA and the NCP to evaluate the proposed remedy. There is some concern that the remedy selected and the process for implementation may not be meet, or be consistent with all of CALFED's goals and objective. More specifically, protection of the environment is not the only criteria U.S. EPA would use to evaluated the cleanup alternatives.

Overall Ranking

Good*

APPLICABILITY TO CVPIA PRIORITIES

1i. Describe the expected contribution to natural production of anadromous fish. Specifically identify the species and races of anadromous fish that are expected to benefit from the project, the expected magnitude of the contribution to natural production for each species and race of anadromous fish, the certainty of the expected benefits, and the immediacy and duration of the expected contribution. Provide quantitative support where available (for example, expected increases in population indices, cohort replacement rates, or reductions in mortality rates).

Eliminating the toxicity from the sludge in the Spring Creek Arm of Keswick Reservoir should have an immediate long-term positive effect on anadromous fish production, particularly on survival of eggs and larval fish in the salmon and steelhead redds located just downstream of Keswick Reservoir. Pre- and post- cleanup surveys will describe the extent of beneficial effects of reduced metal concentrations are having on salmonid egg and juvenile survival. Heavy metal toxicity in the existing sludge from Iron Mountain Mine have catastrophic potential for releasing high metal concentrations into the upper mainstem Sacramento River, impacting federal and state listed anadromous fish species and state listed splittail.*

1j. List the threatened or endangered species that are expected to benefit from the project. Specifically identify the status of the species and races of anadromous fish that are expected to benefit from the project, any other special-status species that are expected to benefit, and the ecological community or multiple-species benefits that are expected to occur as a result of implementing the project.

This proposal benefits Spring-run chinook salmon (threatened), fall-run and late-fall-run chinook salmon (candidate) and winter-run chinook salmon juveniles (endangered) and steelhead (threatened), American shad, striped bass, white and green (state species of concern) sturgeon. Successful implementation of this proposal benefits all other aquatic flora and fauna in the Sacramento River by reducing exposure to toxic heavy metals.*

1k. Identify if and describe how the project protects and restores natural channel and riparian habitat values. Specifically address whether the project protects and restores natural channel and riparian habitat values, whether the project promotes natural processes, and the immediacy and duration of benefits to natural channel and riparian habitat values.

The outcome of this project, identifying an appropriate remedy for eliminating heavy metal toxicity of sludge in the Spring Creek Arm of Keswick Reservoir, once implemented, provides an immediate improvement in water quality and an improved flexibility for the CVP to manage flows below its major impoundments, Shasta and Keswick dams, for better temperature and flow control. This project, if successful, can promote more natural processes in the Sacramento River channel than currently exists*.

1l. Identify if and how the project contributes to efforts to modify CVP operations. Identify the effort(s) to modify CVP operations to which the

proposed project would contribute, if applicable. Efforts to modify CVP operations include modifications to provide flows of suitable quality, quantity, and timing to protect all life stages of anadromous fish as directed by Section 3406 (b)(1)(B) of the CVPIA, including flows provided through management of water dedicated under Section 3406(b)(2) and water acquired pursuant to Section 3406(b)(3).# The USBR currently restricts the manner it operates the CVP facilities to reduce risks of downstream contamination from the toxic sludge into the Sacramento River. These restrictions reduce the beneficial uses of valuable CVP water and restrict operational flexibility of the CVP resources. This proposal's product, if successfully implemented, provides improved flexibility for the CVP to manage flows below its major impoundments.*

1m. Identify if and how the project contributes to implementation of the supporting measures in the CVPIA. Identify the supporting measure(s) to which the proposed project would contribute, if applicable. Supporting measures include the Water Acquisition Program, the Comprehensive Assessment and Monitoring Program, the Anadromous Fish Screen Program, and others.# There are no supporting measures in the CVPIA for clean-up of pollutants from industrial operations on Central Valley streams. However, AFRP Upper mainstem Sacramento River, Action 8 calls for a remedy to water quality problems associated with Iron Mountain Mine consistent with other federal laws, the Comprehensive Environmental Response, Compensation, and Liability Act and the Clean Water Act.*

1n. Summarize comments from section 1i through 1m related to applicability to CVPIA priorities (if applicable, identify the CVPIA program appropriate to consider as the source of CVPIA funding [for example, the Anadromous Fish Restoration Program, Habitat Restoration Program, Water Acquisition Program, Tracy Pumping Plant Mitigation Program, Clear Creek Restoration Program, Comprehensive Assessment and Monitoring Program, and Anadromous Fish Screen Program]). Identify the strengths and weaknesses of the proposal, highlighting the applicability of the proposed project to CALFED and CVPIA goals and priorities. Focus on aspects of the proposal that may be important to later stages in the project review and selection process.# Although anadromous fish restoration is the general priority of the CVPIA, the act does not provide funding for "EPA Supersite" pollution clean-up funding. The AFRP Upper mainstem Sacramento River, Action 8 calls for a remedy to water quality problems associated with Iron Mountain Mine consistent with other federal laws, the Comprehensive Environmental Response, Compensation, and Liability Act and the Clean Water Act. However, clean-up of the Iron Mountain Mine toxic wastes, because of the magnitude of the problem, its potential catastrophic impacts and its location (head of the existing watershed), its remedy is a major priority for successful implementation of CVPIA-AFRP's restoration program, to restore sustainable populations of anadromous fish species in Central Valley streams.*

RELATIONSHIP TO OTHER ECOSYSTEM RESTORATION PROJECTS

2a. Did the applicant explain how the proposed project relates to other past and future ecosystem restoration projects, as required on page 57 in the PSP? Type in yes or no.#yes*

2b. Based on the information presented in the proposal and on other information on restoration projects available to CALFED and CVPIA staff, describe how the proposed project complements other ecosystem restoration

projects, including CALFED and CVPIA. Identify projects or types of projects that the proposed project would complement, now or in the future.

Identify source of information. #This project will study, select and design a remedy for toxic metal sludge near Keswick Dam in the Sacramento River Ecological Zone. Reduction or elimination of the heavy metal contamination would benefit Sacramento River fish and wildlife, and is linked to goals and objectives of CALFED, Recovery Plan for Native Fishes(USFWS 1996), recovery plans for listed fish species (NMFS 1997) and the CVPIA AFRP. Project will provide spawning habitat protection, which is crucial to future habitat and fisheries restoration projects in the watershed. Information source: Proposal.*

RESULTS AND PROGRESS ON PREVIOUSLY FUNDED CALFED AND CVPIA PROJECTS, INCLUDING REQUESTS FOR NEXT-PHASE FUNDING

3a1. Based on the information presented in the proposal and on project reports and data available to CALFED and CVPIA staff, has the applicant previously received CALFED or CVPIA funding? Type CALFED, CVPIA, both, or none. #no*

3a2. If the answer is yes, list the project number(s), project name(s) and whether CALFED or CVPIA funding. If the answer is none, move on to item 4. #
If the answer is no, move on to item 4.*

3b1. Based on the information presented in the proposal and on project reports available to CALFED and CVPIA staff, did the applicant accurately state the current status of the project(s) and the progress and accomplishments of the project(s) to date? Type yes or no. #*

3b2. If the answer is no, identify the inaccuracies: #

3c1. Has the progress to date been satisfactory? Type yes or no. #*

3c2. Please provide detailed comments in support of your answer, including source of information (proposal or other source): #

REQUESTS FOR NEXT-PHASE FUNDING

3d1. Is the applicant requesting next-phase funding? Type yes or no. #no*

3d2. If the answer is yes, list previous-phase project number(s) here. If

the answer is no, move on to item 4.##*

3e1. Does the proposal contain a 2-page summary, as required on pages 57 and 58 of the PSP? Type yes or no.##*

3e2. Based on the information presented in the summary and on project reports available to CALFED and CVPIA staff, is the project ready for next-phase funding? Type yes or no.##*

3e3. Please provide detailed comments in support of your answers, including source of information (proposal or other source):##*

LOCAL INVOLVEMENT

4a. Does the proposal describe a plan for public outreach, as required on page 61 of the PSP? Type yes or no.# Yes*

4b. Based on the information in the proposal, highlight outstanding issues related to support or opposition for the project by local entities including watershed groups and local governments, and the expected magnitude of any potential third-party impacts. # There are no known issues in opposition to this project.*

ENVIRONMENTAL COMPLIANCE

4d. List any potential environmental compliance or access issues as identified in the PSP checklists.# Very thorough. Nothing is needed for this phase but they checked off all permits needed for next phase.*

4e. Specifically highlight and comment on any regulatory issues listed above that may prevent the project from meeting the projected timeline.#None*

COST

5a. Does the proposal include a detailed budget for each year of requested support? Type yes or no.# Yes, it contains a table for "total project costs" (Table 2) and a table for "project costs requested from CALFED"*

5b. Does the proposal include a detailed budget for each task identified? Type yes or no.# Yes*

5c. Is the overhead clearly identified? Type yes or no.# Yes, it is at 90% *

5d. Are project management costs clearly identified? Type yes or no.# Yes, the total project management costs equal 100,200 dollars*

5e. Please provide detailed comments in support of your answers to questions

5a - 5d.# All information requested has been provided by project proponent in a clear, concise, and understandable format.*

COST SHARING

6a. Does the proposal contain cost-sharing? Type yes or no.# Yes*

6b. Are applicants specifically requesting either state or federal cost share dollars? Type state, federal, or doesn't matter. # Doesn't matter*

6c. List cost share given in proposal and note whether listed cost share is identified (in hand) or proposed.

6c1. In-kind:# n/a*

6c2. Matching funds:# n/a*

6c3. Show percentage that cost sharing is of total amount of funding requested along with calculation.# USBR: 92,300 dollars; and USEPA: 185,900. Requesting \$2,418,300.*

6d. Please provide detailed comments in support of your answers to questions

6a - 6c3.# All information requested has been provided by project proponent in a clear, concise, and understandable format*